AMENDMENTS TO THE CLAIMS

1. (currently amended) A method to reduce torque ripple and audible noise in an electric machine, the method comprising:

implementing an ~~initiating~~ initial a rotation of said electric machine at a determinable velocity through a series of open loop commutation pulses, and thereafter deenergizing said electric machine following said initial rotation;

detecting at least one phase voltage signal following said deenergizing said electric machine, said at least one phase voltage signal indicative of a back electromotive force (BEMF) for a selected phase;

~~synthesizing~~ generating at least one waveform indicative of said BEMF for each phase of said electric machine, while said electric machine remains deenergized; and

scaling a command to said electric machine based on said at least one waveform.

2. (currently amended) The method of claim 1 further including equalizing said at least one waveform to compensate for magnitude and frequency variations therein, said variations resulting from said deenergizing said electric machine, and subsequently compensating for a decreasing frequency and amplitude of said at least one waveform.

3. (original) The method of claim 1 further including storing said at least one waveform in memory to facilitate later computations.

4. (original) The method of claim 1 further including compensating said at least one waveform to correlate its frequency to that of a command associated with a selected operational speed of said electric machine.

5. (original) The method of claim 1 further including compensating said at least one waveform to correlate its magnitude to that of a command associated with an

operational speed of said electric machine.

6. (original) The method of claim 5 wherein said compensating includes modulating said command based on said at least one waveform.

7. (original) The method of claim 1, wherein when the electric machine is connected to the electronic control circuit, the electronic control circuit is operative to control the electric machine having one or more magnetic components.

8. (original) The method of claim 7, wherein the electric machine is a brushless DC (BLDC) motor and the electronic control circuit includes at least four inverter transistors configured to operate said motor.

9. (original) The method of claim 1, wherein said command is configured to control said electric machine to maintain speed.

10. (currently amended) A system to reduce torque ripple and audible noise in an electric machine comprising:

an electric machine in operable communication with a control circuit;

said ~~electronic~~ control circuit including a controller configured to ~~generate a voltage command to control each phase of said electric machine and including a controller; and~~ implement an initial a rotation of said electric machine at a determinable velocity through a series of open loop commutation pulses, and thereafter deenergize said electric machine following said initial rotation;

~~wherein~~ said controller ~~is~~ further configured to~~:~~ detect at least one phase voltage signal following the deenergization of said electric machine, said at least one phase voltage signal ~~with said electric machine rotating at a determinable speed, yet unexcited,~~ indicative of a back electromotive force (BEMF) for a selected phase; and

~~synthesize~~ said controller further configured to generate at least one

waveform indicative of said BEMF for each phase of said electric machine while said electric machine is deenergized,; and scale a command to said electric machine based on said at least one waveform.

11. (original) The system of claim 10 further including said controller equalizing said at least one waveform to compensate for magnitude and frequency variations therein, said variations resulting from said deenergizing said electric machine, and subsequently compensating for a decreasing frequency and amplitude of said at least one waveform.

12. (original) The system of claim 10 further including said controller storing said at least one waveform in memory to facilitate later computations.

13. (original) The system of claim 10 further including said controller compensating said at least one waveform to correlate its frequency to that of a command associated with a selected operational speed of said electric machine.

14. (original) The system of claim 10 further including said controller compensating said at least one waveform to correlate its magnitude to that of a command associated with an operational speed of said electric machine.

15. (original) The system of claim 14 wherein said compensating includes modulating said command based on said at least one waveform.

16. (original) The system of claim 10, wherein when the electric machine is connected to the electronic control circuit, the electronic control circuit is operative to control the electric machine having one or more magnetic components.

17. (original) The system of claim 16, wherein the electric machine is a brushless DC (BLDC) motor and the electronic control circuit includes at least four

inverter transistors configured to operate said motor.

18. (original) The method of claim 10, wherein said command is configured to control said electric machine to maintain speed.

19. (currently amended) A storage medium, comprising:

~~encoded with~~ a machine-readable computer program code~~, said code including instructions for causing a computer to implement a method to reduce~~ for reducing torque ripple and audible noise in an electric machine; and

instructions for causing a computer to implement a method, the method comprising:

~~initiating~~ implementing an initial a rotation of said electric machine at a determinable velocity through a series of open loop commutation pulses, and thereafter deenergizing said electric machine following said initial rotation;

detecting at least one phase voltage signal following said deenergizing said electric machine, said at least one phase voltage signal indicative of a back electromotive force (BEMF) for a selected phase;

~~synthesizing~~ generating at least one waveform indicative of said BEMF for each phase of said electric machine, while said electric machine remains deenergized; and

scaling a command to said electric machine based on said at least one waveform.